**Group Members: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**atmosphere and Meteorology Project**

3.e.1-3

**General Directions**: Your group will be given three of the Virginia Beach Objectives related to this unit. Your group will be responsible for **researching the objectives, creating a lesson and developing an activity** to teach the three objectives you have been assigned to the rest of the class. Guiding questions have been provided to help you cover each objective. You will be using a PowerPoint slideshow to use as a visual aid to teach the lesson.

**Step 1**: Research your objective using books and resources provided (Databases located at <https://destiny.vbcps.com> and books). Take notes. Be sure to answer the guiding questions in a way that you can easily explain to your classmates. Diagrams, charts and graphs are great tools to visually interpret information. Collect citation information and save to a location you can access (jump drive, H Drive or SharePoint).

**Step 2:** Organize your information so that you can easily share it with others. Develop a PowerPoint presentation with your group to cover your topic. All group members must contribute to the PPT and participate in the presentation. Use the following format as a template for your PowerPoint.

PowerPoint format:

Slide 1-State Key Concept/Topic

Slide 2:  State objective

Slide 3-4:  Guiding Question with 3-5 bullet points

Slide 5:  State Objective

Slide 6-7:  Guiding Question with 3-5 bullet points

Slide 8:  State Objective

Slides 9-10:  Guiding Question with 3-5 bullet points

Slide 11:  Bibliography

Relevant photos/pictures throughout

**Step 3:** Develop activity to be used by classmates during lesson. All group members must contribute to the activity.

Make a fill-in-the-blank activity (at least 6 statements) to cover objectives 3.e.1 and3.e.2

Create a global climate zone diagram leaving no more than 3 labels blank.

**Step 4:** As a group, practice teaching your lesson. Remember to use the PowerPoint as a guide but do not read it to the class.

**ES3.e Climate**

**3.e.1 Identify the major factors affecting climate: latitude, elevation, ocean currents, prevailing winds and proximity to bodies of water and mountains.**

*Define climate.*

*Define and explain each factor that affect climate.*

*Which factor do you think is most important and why?*

**3.e.2 Identify the major climate zones of the world (polar, temperate and tropical) and relate them to temperature and rainfall.**

*What are the three major climate zones of the globe?*

*Where are they located on the Earth? How does sunlight impact these climate zones?*

*Explain the role of temperature and rainfall in determining each climate zone.*

**3.e.3 Label a diagram of global climate zones and the surface movement of ocean currents.**

*Create a global climate zone diagram.*

*Include the surface movements of the oceans.*

*What are the similarities and differences between the atmospheric and the ocean currents?*

**Fast Facts:**

1. Earth’s major climatic zones are the polar, temperate, and tropical zones.
2. Climate is the average, year-after-year conditions of temperature, precipitation, winds, and cloud cover in an area.